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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/745,693 | 12/22/2000 | Niilo Musikka | 34648-00434USPT | 9663 |
| 27045 | 7590 | 09/09/2004 | EXAMINER | |
| ERICSSON INC. 6300 LEGACY DRIVE M/S EVR C11 PLANO, TX 75024 | | | SHEW, JOHN | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2664 | |

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 09/745,693 | Applicant(s) MUSIKKA ET AL. | |
| | Examiner John L Shew | Art Unit 2664 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Specification

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 5, 7, 8, 9, 11, 12, 13, 14, 16, 17, 19, 20, 21, 23, 24, are rejected under 35 U.S.C. 103(a) as being unpatentable over Honkala et al. in view of Vilander et al.

Claims 1, 2, 4, 5, 7, 8, 9, 11, 12, 13, 14, 16, 17, 19, 20, 21, 23, 24, Honkala teaches network resources in an IP-based system (FIG. 9) referenced by Packet Data Network 14 with resources GateWay 24 Location Reg/Directory Service 104 and Radio GW 16, comprising at least one primary radio network server (FIG. 9) referenced by gatekeepers GK_1002 GK_1006, said at least one of a plurality of primary radio network server coupled to an IP network (FIG. 9) referenced by GK_1002 GK_1006

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coupled to Packet Data Network 14, in said IP-based system and associated with at least one location area (FIG. 9) referenced by areas of Location Area Code LAC_1002 LAC_1008, at least one radio base station (FIG. 9) referenced by radio base stations Radio GW 16, said at least one radio base station coupled to said at least one of a plurality of primary radio network server (FIG. 9) referenced by Radio GW 16 coupled to GK_1002, and said IP network for communication therebetween (FIG. 9) referenced by Packet Data Network 14 used by GK_1002 and Radio GW 16 for communication, at least one secondary radio network server coupled to said IP network (FIG. 9) referenced by GK_1005 operating within Packet Data Network 14, and a lookup medium coupled to said IP network (FIG. 9) referenced by Location Reg/Directory Service 104 operating within Packet Data Network 14, said lookup medium operable to store address information associated with said at least one of a plurality of secondary radio network server (FIG. 10, column 6 lines 52-60) referenced by contents of Location Reg/Directory Service including gatekeepers GK_1005 GK_1009 IP address information.

Honkala teaches said lookup medium comprises a lookup server (FIG. 9, column 6 lines 18-23, column 6 lines 52-56) referenced by Location Reg/Directory Service 104 containing associated gatekeeper IP addresses.

Honkala teaches said lookup medium comprises a database (FIG. 10, column 3 lines 61-67, column 4 lines 1-11) referenced by the database contents of the Location Reg/Directory Service.

Honkala teaches said system further comprises an IP-based Base Station System (FIG. 9, column 1 lines 14-22 lines 53-57) referenced by the Base Station Subsystem implemented by Gateway 24, GateKeepers and Radio Gateways.

Honkala does not teach maintaining availability in response to an operational failure nor selection of a server based on priority ranking.

Vilander teaches response to an operational failure of at least one primary router operable to retrieve address information and connect to one secondary router (FIG. 2, column 7 lines 37-56) referenced by failure of primary Router2 the transfer of IP address to the new routing processor Router1 followed by the handling of traffic thereby maintaining availability of network resources. With the failure of primary Router2, the transfer of IP address is through a alternate server address database lookup. User planes representative of radio base stations obtain the IP address for redirecting traffic to Router1 representative of the radio network server.

Vilander teaches selection of a router recovery is determined by classification of user planes based on priority order.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the mobile communication system recovery method of Vilander to the IP/Celluar communication system of Honkala for the purpose of failure recovery in a routing processor. The routers supporting user planes as disclosed by Vilander are functionally equivalent to the radio network servers GK_1002 supporting the radio base stations Radio GW 16 of Honkala. It would have been further obvious to

classify the user plane radio base stations Radio GW in priority order as suggested by Vilander for the purpose of faster predetermined recovery by the router radio network server.

2. Claims 3, 10, 15, 22, are rejected under 35 U.S.C. 103(a) as being unpatentable over Honkala and Vilander as applied to claims 1-2, 4-5, 7-9 11-14, 16-17, 19-21, 23-24, above, and further in view of Wang.

Claims 3, 10, 15, 22, Honkala and Vilander teach an IP/Cellular communication system with failure recovery. They do not teach a DHCP server.

Wang teaches a lookup medium comprises a DHCP server (column 5 lines 8-15) referenced by a dynamic host configuration protocol server providing a mapping of host names to IP addresses.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the DHCP server of Wang in place of the Location/Reg Directory Service of the mobile communication system recovery method of Honkala and Vilander for the purpose of dynamic DNS update of IP addresses.

3. Claims 6, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honkala and Vilander as applied to claims 1-2, 4-5, 7-9 11-14, 16-17, 19-21, 23-24, above, and further in view of Berg et al.

Claims 6, 18, Honkala and Vilander teach an IP/Cellular communication system with failure recovery. They do not teach a standby network server.

Berg teaches a standby gateway controller (FIG. 1B, Abstract lines 12-21) referenced by Standby Media Gateway Controller 102b which functions to take over communications in the event of an Active controller failure.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the Active/Standby controllers of Berg in place of the radio network server GateKeepers of the mobile communication system recovery method of Honkala and Vilander for the purpose of providing continuous call communication.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John L Shew whose telephone number is 571-272-3137. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ajit Patel
Primary Examiner

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